

- b) the culture of step (i) at a different point in time to the assaying of step (i);  
and  
c) a similar culture to that of step (i) but that does not contain said reagent; and  
(iii) comparing results of the assays of step (i) and (ii) to determine the  
susceptibility of bacteria to said reagent.

**REMARKS**

Reconsideration is requested.

Claims 1 to 35 and 37 are pending. Claim 36 has been canceled, without prejudice. Claims 1-3, 21-35 and 37 have been withdrawn from consideration. Claims 4-20 are under active consideration.

Return of an a further initialed copy of the PTO 1449 Form returned with the Office Action dated December 20, 2002 (Paper No. 7) is requested as the returned copy does not contain the Examiner's initials in the left margin next to the Patent Abstracts of Japan citation. As the Examiner has signed and dated the entirety of the references cited in the PTO 1449 Form are assumed to have been considered. The formality however of a completely initialed PTO 1449 Form is requested.

Acknowledgement of the acceptability of the drawings, in the Examiner's next communication, is requested.

The applicants acknowledge, with appreciation, the Examiner's indication that the Abstract of the PCT application will be inserted, where appropriate, by the Examiner. The Examiner is requested to advise the undersigned in the event anything further is required in this regard.

The Section 112, second paragraph, rejection of claims 4-20 and 36 is obviated by the above amendments. Reconsideration and withdrawal of the Section 112, second paragraph, rejection are requested.

The Section 103 rejection of claims 4-20 and 36 over Squirrell (WO 96/02666) and Sanders (WO 94/064931) is traversed. Reconsideration and withdrawal of the rejection are requested in view of the following distinguishing remarks.

The applicants submit that the Examiner's objections are unfounded. The Examiner has presented a series of features found in Squirrell and a series of features

that can be found in Sanders and then merely asserted that the present claims would have been obvious over a combination of the two pieces of cited art. The Examiner has presented no coherent argument as to why the present invention would have been obvious over a combination of Squirrell and Sanders. Furthermore, it appears that the Examiner's arguments are directed against all of claims 4-20, without giving any relationship between the features cited in the cited prior art and the features found in the claims.

*Preamble being*

The applicants believe that it will be clear to one of ordinary skill in the art that claim 4, for example, would not have been obvious over Squirrell in the light of Sanders. The Examiner asserts that the incorporation of the teaching of Sanders into Squirrell would have made the subject matter of claim 4 obvious since Sanders teaches that samples are to be taken at "different" times, and that the incorporation of this feature into Squirrell would have made the subject matter of claim 4 obvious. The applicants request however the Examiner's reconsideration as Squirrell and Sanders both teach methods of detecting or quantifying bacteria. Neither teaches or suggests methods of determining the susceptibility of bacteria to reagents. Furthermore, Sanders indicates that only one measurement should be taken, this measurement being taken at the end of the phase replication cycle. Claim 4 makes it clear that the "different point in time" refers to the taking of two measurements at mutually different points in time and that these measurements should be compared in order to determine the susceptibility of the bacteria to reagents. *optional*

A combination of Squirrell and Sanders would lead to the method of Sanders, where the measurement is made at the end of the phase replication cycle, being incorporated into the method of Squirrell. This would result in a method of detecting or quantifying bacteria, not a method of determining the sensitivity of bacteria to reagents. *W/C*

Thus, the applicants believe that the subject matter of claim 4 and all the dependent claims would not have been obvious in the light of the cited prior art.

Reconsideration and withdrawal of the Section 103 rejection are requested.

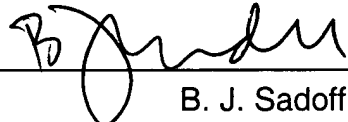
In view of the above and attached, the claims are submitted to be in condition for allowance and a Notice to that effect is requested.

**In re Application of: MURPHY et al**  
Serial No. 09/600,398

Should the Examiner feel that an interview with the undersigned would facilitate allowance of this application, the Examiner is encouraged to contact the undersigned.

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

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**MARKED-UP COPY OF AMENDED CLAIMS**

**IN THE CLAIMS:**

Amend the claims as follows:

4. (Amended) A method for determining the susceptibility of a bacteria to a reagent, which method comprises [assaying for] the steps of:

(i) assaying for adenylate kinase released by lysis of bacteria from a culture containing said reagent [and comparing the results with those obtained from a similar adenylate kinase assay which is either of the culture prior to addition of reagent, and/or of lysed bacteria from the same culture at a different point in time and/or of lysed bacteria from a similar culture which does not contain the reagent];

(ii) assaying for adenylate kinase released by lysis of bacteria from one or more of the following cultures:

a) the culture of step (i) but prior to the addition of said reagent

b) the culture of step (i) at a different point in time to the assaying of step (i);

and

c) a similar culture to that of step (i) but that does not contain said reagent; and

(iii) comparing results of the assays of step (i) and (ii) to determine the susceptibility of bacteria to said reagent.